

Appendix 4: Reclassification tables comparing diagnostic risk categories of pneumonia by the diagnostic models with and without CRP. [posted as supplied by author]

A. Using 2% as threshold for low probability of pneumonia.

B. Using 1% as threshold for low probability of pneumonia.

C. Using 15% as threshold for high probability of pneumonia.

D. Using 25% as threshold for high probability of pneumonia.

A. Using 2% as threshold for low probability of pneumonia.

Symptoms and signs model (without CRP)	Symptoms and signs model with addition of CRP-30			
Frequency (row %)	<2%	2-20%	>20%	Total
<i>Patients with pneumonia</i>				
<2%	4 (36)	7 (64)	0 (0)	11
2-20%	17 (16)	66 (63)	22 (21)	105
>20%	0 (0)	5 (21)	19 (79)	24
Total	21	78	41	140
<i>Patients without pneumonia</i>				
<2%	568 (87)	86 (13)	0 (0)	654
2-20%	702 (35)	1221 (61)	64 (3)	1987
>20%	0 (0)	12 (31)	27 (69)	39
Total	1270	1319	91	2680

Legend: Bold numbers are totals per diagnostic risk category. Grey shaded numbers are patients classified in agreement according to the model with and without CRP-30. Reclassification improvement is 5% among patients with pneumonia (29-22 of 140) and 21% among patients without pneumonia (714-150 of 2680), resulting in a net reclassification improvement of 21+5= 26% (95% CI 16-36).

B. Using 1% as threshold for low probability of pneumonia.

Symptoms and signs model (without CRP)	Symptoms and signs model with addition of CRP-30			
Frequency (row %)	<1%	1-20%	>20%	Total
<i>Patients with pneumonia</i>				
<1%	0 (0)	0 (0)	0 (0)	0
1-20%	0 (0)	94 (81)	22 (19)	116
>20%	0 (0)	5 (21)	19 (79)	24
Total	0	99	41	140
<i>Patients without pneumonia</i>				
<1%	0 (0)	0 (0)	0 (0)	0
1-20%	0 (0)	2577 (98)	64 (2)	2641
>20%	0 (0)	12 (31)	27 (69)	39
Total	0	2589	91	2680

Legend: Bold numbers are totals per diagnostic risk category. Grey shaded numbers are patients classified in agreement according to the model with and without CRP-30. Reclassification improvement is 12% among patients with pneumonia (22-5 of 140) and -2% among patients without pneumonia (12-64 of 2680), resulting in a net reclassification improvement of 12-2= 10% (95% CI 4-17)

C. Using 15% as threshold for high probability of pneumonia.

Symptoms and signs model (without CRP)	Symptoms and signs model with addition of CRP-30			
Frequency (row %)	<2%	2-15%	>15%	Total
<i>Patients with pneumonia</i>				
<2%	4 (36)	7 (64)	2 (0)	11
2-15%	17 (18)	61 (63)	19 (20)	97
>15%	0 (0)	6 (19)	26 (81)	32
Total	21	74	45	140
<i>Patients without pneumonia</i>				
<2%	568 (87)	86 (13)	0 (0)	654
2-15%	702 (36)	1161 (60)	73 (4)	1936
>15%	0 (0)	43 (48)	47 (52)	90
Total	1270	1290	120	2680

Legend: Bold numbers are totals per diagnostic risk category. Grey shaded numbers are patients classified in agreement according to the model with and without CRP-30. Reclassification improvement is 4% among patients with pneumonia (28-23 of 140) and 22% among patients without pneumonia (745-159 of 2680), resulting in a net reclassification improvement of 4+22= 26% (95% CI 14-34%).

D. Using 25% as threshold for high probability of pneumonia.

Symptoms and signs model (without CRP)	Symptoms and signs model with addition of CRP-30			
Frequency (row %)	<2.5%	2.5-25%	>25%	Total
<i>Patients with pneumonia</i>				
<2.5%	4 (36)	7 (64)	0 (0)	11
2.5-25%	17 (15)	78 (70)	17 (15)	112
>25%	0 (0)	2 (12)	15 (88)	17
Total	21	87	32	140
<i>Patients without pneumonia</i>				
<2.5%	568 (87)	86 (13)	0 (0)	654
2.5-25%	702 (35)	1265 (63)	33 (2)	2000
>25%	0 (0)	8 (31)	18 (69)	26
Total	1270	1359	51	2680

Legend: Grey shaded numbers are patients classified in agreement according to the model with and without CRP-30. Of all patients with pneumonia 24 (7+17+0) are reclassified to higher risk groups, and 19 (17+2+0) to lower risk groups. For patients without pneumonia this is 119 (86+33) and 710 (702+8), respectively. Reclassification improvement is 4% among patients with pneumonia (24-19 of 140) and 22% among patients without pneumonia (710-119 of 2680), resulting in a net reclassification improvement of 4+22=26% (95% CI 16-35%).